

Amendments to the Claims

Please cancel claims 2-11, 13-16, 18-19, 21, 23-24, and 27-48 without prejudice or disclaimer of the subject matter therein; amend claims 1, 12, 17, 20, 22, 25, and 26; and add new claims 49-54 as follows:

1. (currently amended) ~~A method for treating a connective tissue disorder in a mammalian host, the method comprising transducing a population of target cells with a recombinant vector encoding a therapeutic protein, or a biologically active derivative or fragment thereof, and transplanting said transduced cells into the mammalian host, such that subsequent expression of the therapeutic protein, or a biologically active derivative or fragment thereof within the host reduces at least one deleterious joint pathology or indicia of inflammation normally associated with a connective tissue disorder~~ arthritis in a mammalian host, comprising:

generating a recombinant viral vector comprising a DNA sequence encoding soluble IL-1 receptor operatively linked to a promoter;

infecting *in vitro* population of autologous synovial cells with said recombinant viral vector resulting in a population of transduced synovial cells; and

transplanting said transduced synovial cells by intraarticular injection to an arthritic joint space of a mammalian host, such that expression of said DNA sequence in said joint space results in reduction of cartilage destruction or reduction in synovitis.

2-11. (Canceled)

12. (Currently amended) The method of Claim 2 1, wherein said ~~therapeutic protein is a~~ soluble IL-1 receptor is selected from the group consisting of soluble IL-1 receptor Type 1 and soluble IL-1 receptor Type II.

13-16. (Canceled)

17. (Currently amended) The method of Claim ~~15~~ 1, wherein said recombinant viral vector is an adenovirus.

18. (Canceled).

19. (Canceled).

20. (Currently amended) The method of Claim 2 1, wherein transplantation of the transduced cells is by intraarticular injection.

21. (Canceled).

22. (Currently amended) The method of Claim ~~15~~ 49, wherein the viral vector is an MFG vector ~~and the therapeutic protein, or a biologically active derivative or fragment thereof is sIL-1R.~~

23. (Canceled).

24. (Canceled).

25. (Currently amended) The method of Claim 22 1, further including the step of storing said population of transduced cells prior to transplantation.

26. (Currently amended) The method of Claim 25, wherein said population of transduced ~~connective~~ cells are stored in 10% DMSO under liquid nitrogen prior to transplantation.

27-48. (Canceled).

49. (New) The method according to Claim 1, wherein the viral vector is a retroviral vector.

50. (New) The method according to Claim 1, wherein the viral vector is an adeno-associated viral vector.

51. (New) The method according to Claim 1, wherein the viral vector is a herpes simplex viral vector.

52. (New) A method for treating arthritis in a mammalian host, comprising:
generating a recombinant plasmid vector comprising a DNA sequence encoding soluble IL-1 receptor operatively linked to a promoter;

transforming *in vitro* population of synovial cells with said recombinant plasmid vector resulting in a population of transformed synovial cells; and

transplanting said transformed synovial cells by intraarticular injection to an arthritic joint space of a mammalian host, such that expression of said DNA sequence in said joint space results in reduction of cartilage destruction or reduction in synovitis.

53, (New) The method of Claim 52, further including the step of storing said population of transformed cells prior to transplantation.

54. (New) The method of Claim 53, wherein said population of transformed cells are stored in 10% DMSO under liquid nitrogen prior to transplantation.

REMARKS

Claims 1, 12, 17, 20, 22, 25, 26, and 49-54 are pending in the application. Claims 1, 12, 17, 20, 22, 25, and 26 have been amended. New claims 49-54 have been added. Support for the amendments to the claims can be found throughout the specification, in particular at page 69, in which is described the use of soluble IL-2 receptor for expression in rabbit knees. Support for the newly added claims 49-54 can be found at, *inter alia*, pages 8 and 9 in the specification for the description of plasmid-based transformation of synoviocytes, and page 69 for the various recited viral vectors. No new matter has been inserted into the application hereby.